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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/736,640	12/14/2000	Eric J. Panken	P-7443	8153
27581	7590 12/12/2002			
MEDTRONIC, INC.			EXAMINER	
710 MEDTRONIC PARKWAY NE MS-LC340 MINNEAPOLIS, MN 55432-5604		PAIK, SANG YEOP		
			ART UNIT	PAPER NUMBER
			3742	<u> </u>
			DATE MAILED: 12/12/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

The state of the s	(_				
	Application No.	Applicant(s)				
	09/736,640	PANKEN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Sang Y Paik	3742				
Th MAILING DATE of this communication appears on the cover shet with the correspondence address Peri df r Reply						
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of the period of the period for reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be y within the statutory minimum of thirty (30) d will apply and will expire SIX (6) MONTHS fro , cause the application to become ABANDON	timely filed ays will be considered timely. m the mailing date of this communication. IED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on	·					
2a) This action is FINAL . 2b) ⊠ Th	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-14</u> is/are pending in the application						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-14</u> is/are rejected.						
<u> </u>	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o Application Papers	r election requirement.					
	r					
9) The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 10 January 2002 is/are: a) □ accepted or b) ☑ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1.☐ Certified copies of the priority document	s have been received.					
<u> </u>	_					
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list	·					
14) Acknowledgment is made of a claim for domesti						
 a) The translation of the foreign language pro 15) Acknowledgment is made of a claim for domest 						
Attachment(s)						
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6 	5) Notice of Informa	ary (PTO-413) Paper No(s) al Patent Application (PTO-152)				

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DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the subcutaneous electrodes in claim 1 and a plurality of filters in claim 6 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 3. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 14, there is no teaching how these recited acronyms are "PR", "AV" and "VA" are defined.
- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is no proper antecedent basis for "the system".

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Bennett et al (US 5,331,966). Bennett et al discloses the claimed circuit having a means for detecting atrial depolarization signals by the subcutaneous electrodes provided on a hermetically sealed case, a

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means for pacing having a pacing lead into the right ventricle of a heart. Bennett further shows that the lead can be made from unipolar or bipolar leads.

- 8. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Dufffin (US 6,230,059). See Figure 2, column 7, lines 5-49.
- 9. Claims 12-14 are rejected under 35 U.S.C. 102(a) as being anticipated by Nigam et al (WO 00/61225).

Nigam et al shows the method of staring a PR cross check, discounting a p-wave, triggering a PVAPR interval when R-wave is detected, the PVAPR is used to blank p-waves and preventing PMT, and the VA interval extended by an AV interval is shown by the delay signal in Figure 2 with a p-wave being sensed after such interval.

Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al (US 5,331,966) in view of Rapach et al (US 4,907,593) or Pless et al (US 5,489,293).

Bennett et al discloses all the structure including receiving ECG data generated from the SEA and the external lead. Bennett et al, however, does not show having a digital to analog converter (DAC).

Rapach et al shows having a DAC for converting the digital signal to an analog signal to set the analog amplitude of the pulse output delivered to the lead in the heart. Pless et al also

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shows having a DAC in a ventricular pace unit to provide the regulated voltages to the lead in the

heart.

In view of Rapach et al or Pless et al, it would have been obvious to one of ordinary skill

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in the art to adapt Bennett et al with the DAC unit to provide the analog signals to the lead in the

art to trigger the desired stimulation.

The prior art made of record and not relied upon is considered pertinent to applicant's 12.

disclosure. Gilkerson et al (US 6,304,778), Stadler et al (US 6,381,493), Kroll (US 5,738,105),

Maarse (US 6,128,535) and Sloman et al (US 6,345,201).

Any inquiry concerning this communication or earlier communications from the 13.

examiner should be directed to Sang Y Paik whose telephone number is 703-308-1147. The

examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Teresa Walberg can be reached on 703-308-1327. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-872-9302 for regular

communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-308-0861.

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Sang Y Paik **Primary Examiner**

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December 11, 2002